

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT


(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 50456-16	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA/416)	
International application No. PCT/CA 03/01189	International filing date (day/month/year) 08.08.2003	Priority date (day/month/year) 16.08.2002
International Patent Classification (IPC) or both national classification and IPC C07F9/54		
Applicant CYTEC CANADA INC. et al.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 5 sheets, including this cover sheet.
 - ☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:
 - I ☒ Basis of the opinion
 - II ☐ Priority
 - III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
 - IV ☐ Lack of unity of invention
 - V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 - VI ☐ Certain documents cited
 - VII ☐ Certain defects in the international application
 - VIII ☐ Certain observations on the international application

Date of submission of the demand 02.03.2004	Date of completion of this report 30.09.2004
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80293 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer Kyriakakou, G Telephone No. +49 89 2399-7835



**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. **PCT/CA 03/01189**

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17))*):

Description, Pages

1-18 as originally filed

Claims, Numbers

1-13 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
 - ☐ the language of publication of the international application (under Rule 48.3(b)).
 - ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).
3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:
- ☐ contained in the international application in written form.
 - ☐ filed together with the international application in computer readable form.
 - ☐ furnished subsequently to this Authority in written form.
 - ☐ furnished subsequently to this Authority in computer readable form.
 - ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
 - ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

3. Additional observations, if necessary:

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**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement**

1. Statement

Novelty (N)	Yes: Claims	1-13
	No: Claims	
Inventive step (IS)	Yes: Claims	
	No: Claims	1-13
Industrial applicability (IA)	Yes: Claims	1-13
	No: Claims	

2. Citations and explanations

see separate sheet

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Re Item V

Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Cited documents

WO-A-0187900 (=D1)

WO-A-0016902 (=D2)

WO-A-9723490 (=D3)

EP-A-1182197 (=D4)

Patent Abstr.Japan vol.012, n0 .365 &JP 63119490 (=D5)

Chem.Reviews 99, p. 2071 (1999) (=D6)

The indicated designation is used throughout the examination procedure

2. Certain published documents (Rule 70.10)

Application No Patent No	Publication date (day/month/year)	Filing date (day/month/year)	Priority date (valid claim) (day/month/year)
WO-A-03051894	26.03.2003	13.02.2002	14.12.2001
WO-A-02079212	10.10.2002	28.02.2002	30.03.2001

3. Novelty(Art.33(2)PCT)

3.1 The subject matter of the present claims 1-13 relates to quaternary phosphonium and imidazolium salts wherein the anion is a sulfate ester, a phosphonate diester or a phosphonate ester. The said salts are not specifically disclosed in the prior art D1-D3 documents and can therefore be considered as a novel selection from the said documents.

3. Inventive step(Art.33(3) PCT)

3.1 The object of the present invention is to provide compounds usefull as polar solvents

3.2 The prior art documents D1-D4 which disclose structurally similar compounds having the same utility are considered to be especially relevant.

3.3 The Application does not contain any experimental data for the alleged utility of the claimed compounds. Taking the above into account it could be postulated that the previous defined problem has not be solved. The technical problem which is solved by the claimed compounds, on the basis of which the question of inventive step has to be decided, would be the mere provision of further or alternative chemical compounds as such, regardless of their likely useful properties. But a chemical compound is not patentable per se as long as it did not manifest itself in a valuable property in the widest sense, an effect or an unexpected property. Furthermore from the prior art D1-D4

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documents it is known that structurally similar compounds can be used as polar solvents. It has also to be pointed out that the claimed compounds are considered as a selection from the D1-D3 documents. Thus, the subject-matter of claims 1-13 on file. does not involve an inventive step and does not satisfy the criterion set forth in Article 33(3) PCT.